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wiring line by a second section of said second wiring line, which penetrates a portion of said second film section; and

an opening formed in said third and second film sections of said dielectric film and between said first and second wiring lines, wherein said opening provides access to said laser beam to oxidize said copper fuse section in said oxidizing environment.

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- 4. (Twice Amended) A semiconductor memory device according to claim 1, wherein at least one of said first wiring line, said first section of said first wiring line, said second wiring line, and said second section of said second wiring line includes copper.
- 5. (Twice Amended) A semiconductor memory device according to claim 2, wherein at least one of said first wiring line, said first section of said first wiring line, said second wiring line, and said second section of said second wiring line includes copper.

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17. (Amended) A semiconfluctor device including a copper fuse, said copper fuse being programmed to a high resistance state by oxidation, wherein said high resistance state results from a cross section of said copper fuse being oxidized in an oxygen atmosphere to copper oxide.

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20. (Amended) A semiconductor device that includes a copper fuse, comprising:
a dielectric film including a first film section formed over a substrate, a second
film section formed on said first film section, and a third film section formed on
said second film section;

a first wiring line and a second wiring line, each of said first wiring line and said second wiring line being formed on said second film section of said dielectric film;

said copper fuse formed on said first film section of said dielectric film, an end of said copper fuse being directly connected to said first wiring line by a first section of said first wiring line, which penetrates a portion of said second film section, and another end of said copper fuse being directly connected to said second wiring line by a second section of said second wiring line, which penetrates a portion of said second film section, and said

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copper fuse being programmed to a high resistance state by oxidation; and an opening formed in said third and second film sections of said dielectric film and between said first wiring line and said second wiring line,

wherein said high resistance state results from a cross section of said copper fuse being oxidized to copper oxide and said cross section is located in said opening.

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23. The semiconductor device according to claim 20, wherein at least one of said first wiring line, said first section of said first wiring line, said second wiring line and said second section of said wiring line includes copper.

Please add claims 26-28 as follows:

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- 26. A semiconductor device comprising a copper fuse, the copper fuse being programmed to a high resistance state by oxidation, wherein the copper fuse comprises a portion being pinched off with copper oxide.
- 27. A semiconductor device according to claim 26, wherein the copper fuse is formed on a dielectric film that has a thermal endurance of 350° C or greater.
- 28. A semiconductor device according to claim 26, wherein the copper fuse is formed on a dielectric film that has a relative dielectric constant equal to or lower than 4.